



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,847	02/20/2004	Hirohito Yoneyama	TAYO-17/32740	7515
46668	7590	08/14/2006	EXAMINER	
FILDES & OUTLAND, P.C. 20916 MACK AVENUE, SUITE 2 GROSSE POINTE WOODS, MI 48236			YAMNITZKY, MARIE ROSE	
			ART UNIT	PAPER NUMBER

1774

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,847

Applicant(s)

YONEYAMA ET AL.

Examiner

Marie R. Yamnitzky

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004 and 27 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>rec'd 20 Feb 2004 and 27 Jul 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1774

1. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention.

The specification provides insufficient guidance to be able to determine, without undue experimentation, the scope of charge transport materials that satisfy Expressions (1) and (2). The specification provides insufficient information to enable one of ordinary skill in the art at the time of the invention to make the claimed device, wherein the charge transport material is selected based on its ability to satisfy the relations of Expressions (1) and (2), without undue experimentation. Insufficient information is provided even in the case of claims 5 and 6, which provide a general formula for a portion of the material (in the case of claim 5) and a general formula for the material (in the case of claim 6).

There are numerous potentially usable charge transport materials, some of which are polymers and others of which are not. The specification does not provide any specific examples of non-polymeric charge transport materials that satisfy Expressions (1) and (2). With respect to polymeric charge transport materials, the specification discloses hundreds of potentially usable polymers but, based on the teachings in the first paragraph of page 66, not even all polymers having the disclosed formulae will satisfy Expressions (1) and (2). The specification teaches that whether polymers of the disclosed formulae satisfy Expressions (1) and (2) depends on synthesis method and synthesis conditions. The specification does not provide any specific examples of synthesis methods and conditions which provide polymer charge transport materials that satisfy

Art Unit: 1774

Expressions (1) and (2). The specification provides four device examples, each utilizing a different polymer charge transporting material that is said to satisfy Expressions (1) and (2), but the synthesis methods/conditions by which these four polymer materials were made are not disclosed. Even if one were to make a polymer having a partial structure as in claim 5 and represented by a formula as in claim 6, if the resultant polymer did not satisfy Expressions (1) and (2), one would have to undergo undue experimentation to determine the alterations necessary to provide a polymer that satisfies Expressions (1) and (2).

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2002/0050597 A1 and US 2002/0182440 A1 disclose polymers represented by formulae set forth in the present application, and disclose these polymers for use in an organic electroluminescent device. However, based on the teachings on page 66 of the present specification, some polymers represented by these formulae meet present Expressions (1) and (2) while others do not. There is insufficient information of record to determine which, if any, of the polymers disclosed in the prior art meet Expressions (1) and (2).

3. With respect to the IDS received February 20, 2004, no copy of the third non-patent literature document (Proceedings of the 38th Meeting...) is in the IFW. The examiner does not know whether a copy of this document was provided by applicant but not scanned into the IFW,


Art Unit: 1774

or if no copy of the document was provided. This document has not been considered by the examiner.

4. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY
August 03, 2006


MARIE YAMNITZKY
PRIMARY EXAMINER
1774